

## IN THE CLAIMS

Claims 1-18 (cancelled)

Claim 19 (previously presented) A catalyst composition for the purification of terephthalic acid from p-carboxybenzaldehyde comprising crystallites of catalytically active palladium or palladium and at least one metal of Group VIII of the Periodic Table of Elements, applied to the surface of a carbon material, wherein a mesoporous graphite-like material with the average mesopore size in the range of from 40 to 400 Å, the proportion of the mesopores in the total pore volume of at least 0.5, and the degree of graphite-similarity of at least 20% is used as the carbon material, in which metal crystallites are distributed in the volume of the carbon material granules in such a manner that the distribution peaks of these crystallites should be at a distance from the outer surface of the granule corresponding to 1-30% of its radius.

Claim 20 (previously presented) The catalyst composition of claim 19, wherein it comprises crystallites of rhodium and palladium.

Claim 21 (previously presented) The catalyst composition of claim 19, wherein it comprises crystallites of palladium and ruthenium.

Claim 22 (previously presented) The catalyst composition of claim 19, wherein it comprises crystallites of palladium and platinum.

Claim 23 (previously presented) The catalyst composition of claim 19, wherein the

total content of metals therein varies within the range of from 0.1 to 3.0 percent by weight.

Claim 24 (previously presented) The catalyst composition of claim 19, wherein the weight ratio of palladium to other metals varies within the range of from 0.1 to 10.0.

Claim 25 (previously presented) A method of preparing a catalyst composition for the purification of terephthalic acid from p-carboxybenzaldehyde, claimed in claim 19, comprising in applying catalytically active palladium or palladium and at least one of Group VIII metals to the surface of granules of a carbon carrier, said granules being contacted with an aqueous solution of palladium salts or palladium salts and salts of at least one of Group VIII metals to produce a "metal salt - porous carbon" precursor, wherein the precursor is dried and treated with a reducing agent in an amount sufficient for reducing the surface metal salts to the metal crystallites, characterized in that a mesoporous graphite-like material with the average mesopore size in the range of from 40 to 400 Å, the proportion of the mesopores in the total pore volume of at least 0.5, and the degree of graphite-similarity of at least 20% is used as the carbon material to produce a metallic or bimetallic catalyst.

Claim 26 (previously presented) The method of claim 25, wherein said catalyst composition is prepared, using one of the following metal precursors:

$\text{H}_2\text{PdCl}_4$  or  $\text{Pd}(\text{NO}_3)_2$ ;

$\text{H}_2\text{PdCl}_4$  and  $\text{RuOHCl}_3$  or  $\text{RuNO}(\text{NO}_3)_3$ ;

$\text{Pd}(\text{NO}_3)_2$  and  $\text{RuOHCl}_3$  or  $\text{RuNO}(\text{NO}_3)_3$ .

Claim 27 (previously presented) The method of claim 25, wherein said catalyst composition is prepared, using nitric acid solutions of palladium and/or ruthenium salts with

the concentration of free nitric acid ranging from 37 to 170 g/l.

Claim 28. (previously presented) The method of claim 25, wherein bimetallic catalysts are prepared by combined application of metal precursors.

Claim 29. (previously presented) The method of claim 25, wherein bimetallic catalysts are prepared by successive application of metal precursors.

Claim 30. (cancelled)

Claim 31. (currently amended) The method of claim ~~30~~ 37, wherein the catalyst composition comprises crystallites of palladium and rhodium.

Claim 32. (currently amended) The method of claim ~~30~~ 37, wherein the catalyst composition comprises crystallites of palladium and ruthenium.

Claim 33. (currently amended) The method of claim ~~30~~ 37, wherein the catalyst composition comprises crystallites of palladium and platinum.

Claim 34. (currently amended) The method of claim ~~30~~ 37, wherein the total content of metals in the catalyst composition varies within the range of from 0.1 to 3.0 percent by weight.

Claim 35. (currently amended) The method of claim ~~30~~ 37, wherein the weight ratio of palladium to other metals in the catalyst composition varies ~~[[i]]~~ within the range of 0.1 to

10.0.

Claim 36. (currently amended) The method of claim ~~30~~ 37, wherein the concentration of ~~p-carboxybenzaldehyde~~ p-carboxybenzaldehyde in terephthalic acid to be purified varies from 1000 to 30000 ppm.

Claim 37 (new) A method for the purification of crude terephthalic acid comprising p-carboxybenzaldehyde wherein said method comprises contacting an aqueous solution of the crude terephthalic acid with a catalyst according to claim 19 at elevated temperature and in the presence of hydrogen and thereafter cooling the hydrogenated aqueous solution to effect separation of the resulting purified terephthalic from said solution by crystallization.